APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/657,685	09/08/2000	Tony Krstanovski	040020-153	2668

37825	7590	06/04/2004		

ERICSSON INC.
6300 LEGACY DRIVE
M/S EVR C11
PLANO, TX 75024

EXAMINER
HAN, CLEMENCE S

ART UNIT	PAPER NUMBER
2665	

DATE MAILED: 06/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>3/23/2004</u>.
2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
   closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-15</u> is/are pending in the application.
   4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>1-15</u> is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a)☐ All b)☐ Some * c)☐ None of:
     1.☐ Certified copies of the priority documents have been received.
     2.☐ Certified copies of the priority documents have been received in Application No. _____.
     3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
        application from the International Bureau (PCT Rule 17.2(a)).
   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____.
4)☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____ .

DETAILED ACTION

Response to Amendment

1.   Responsive to amendment received on March 23, 2004, amended claims 1–

3, 6–8 and 11–13 are entered as requested.

Claim Objections

2.   Claim 2, 6 and 11 are objected to because of the following informalities:

Applicants uses an inconsistent marking system to mark deleted matter. For

example, applicant uses a double blanket to mark "data" deleted in the claim 2 line

2 and also uses a strikethrough to mark "second" deleted in the claim 2 line 3. It is

advised to use a single marking system to mark the changes in the claim. For the

further directions, refer to MPEP § 714. Appropriate correction is required.

3.   Claim 1 is objected to because of the following informalities: According to

the limitations in the claim 1 and the teachings in the specification, the second

node is 3G–GSN server handling control data and the third node is 3G–GSN

gateway handling user data. However, the preamble of the claim 1 describes "user

functions and control functions are separately implemented in second and third

nodes, respectively" in line 3 and 4. It should have been the other way around.

Appropriate correction is required.

4.   Claim 3 is objected to because of the following informalities: According to

the limitations in the claim 1 and the teachings in the specification, the second

node is 3G–GSN server handling control data and the third node is 3G–GSN

gateway handling user data. The specification further teaches the steps of

extracting and forwarding control data performed in the third node (3G–GSN

gateway) not in the "second node" (3G–GSN server) as described in line 2.

Appropriate correction is required.

5.   Claim 6 is objected to because of the following informalities: According to

the limitations in the claim 6 and the teachings in the specification, the second

node is 3G–GSN server handling control data and the third node is 3G–GSN

gateway handling user data. The specification further teaches the steps of

forwarding control data to the second node (3G–GSN server) not "to the third

node" (3G–GSN gateway) as described in line 10. Appropriate correction is

required.

6.   Claim 12 is objected to because of the following informalities: There are

grammatical errors in the claim which make the claim indefinite. For example, the

line 3 "which converts the control data to GTP returns ..." is incomprehensible.

Also, the acronym "GTP" is used without showing what it stands for. Appropriate

correction is required.

7.   Claim 13 is objected to because of the following informalities: According to

the limitations in the claim 11 and the teachings in the specification, the second

node is 3G–GSN server handling control data and the third node is 3G–GSN

gateway handling user data. The specification further teaches the splitter in the

third node (3G–GSN gateway) not in the "second node" (3G–GSN server) as

described in line 2.

Claim Rejections - 35 USC § 112

8.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
> subject matter which the applicant regards as his invention.

9.   Claim 1 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter

which applicant regards as the invention.

10.   Claim 1 recites the limitation "the received data" in line 9. There is

insufficient antecedent basis for this limitation in the claim.

11.   Claim 13 recites the limitation "the splitter" in line 1. There is insufficient

antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

12.   The text of those sections of Title 35, U.S. Code not included in this action

can be found in a prior Office action.

13.   Claim 1–3, 6–8 and 11–13 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Darland et al. (US Patent 5,793,771) in view of Lehtimaki et al.

(US Pub. 2002/0085512).

In regarding to claim 1, Darland teaches a method for enabling

communication between a first network in which control functions and user

functions are combined in a first node and a second network in which user

functions and control functions are implemented in second and third nodes,

respectively, the method comprising the steps of: receiving a communication in the

third node (Column 2 Line 51); determining whether the received communication

contains control data; if the received data contains control data, extracting control

data from the received communication (Column 8 Line 29–34); and processing

user data from the communication in the third node (Column 8 Line 62 – Column 9

Line 12). Darland, however, does not teach implementing the second (control

function) and the third (user function) nodes separately and forwarding the control

data to the second node for resource handling. Lehtimaki teaches implementing

the second (control function) and the third (user function) nodes separately [0018]

and forwarding the control data to the second node for resource handling [0040]. It

would have been obvious to one skilled in the art to modify Darland to use separate

nodes for the control and user function and forward the control data to the second

node for resource handling as taught by Lehtimaki in order to achieve more

efficient use of network resources [0041].

In regarding to claim 2, Lehtimaki teaches if the received communication

does not contain control data, the received communication processed by the third

node and then forwarded to the first node [0037].

In regarding to claim 3, Darland teaches the steps of extracting the control

data performed in the third node (Column 8 Line 29–34). Darland, however, does

not teach forwarding control data. Lehtimaki teaches forwarding the control data

[0040]. It would have been obvious to one skilled in the art to modify Darland to

forward the control data as taught by Lehtimaki in order to achieve more efficient

use of network resources [0041].

In regarding to claim 6, Darland teaches an apparatus for enabling

communication between a first network in which control functions and user

functions are combined in a first node and a second network in which control

functions and user functions are implemented in second and third nodes,

respectively, the apparatus comprising: a receiver in the third node for receiving a

communication (Column 2 Line 51); a detector for detecting whether the received

communication contains control data (Column 8 Line 29–34); a protocol splitter

for extracting detected control data from the received communication (Column 8

Line 29–34), wherein user data from the communication is processed in the third

node (Column 8 Line 62 – Column 9 Line 12). Darland, however, does not teach

implementing the second (control function) and the third (user function) nodes

separately and forwarding the control data to the second node for resource

handling. Lehtimaki teaches implementing the second (control function) and the

third (user function) nodes separately [0018] and forwarding the control data to the

second node for resource handling [0040]. It would have been obvious to one

skilled in the art to modify Darland to use separate nodes for the control and user

function and forward the control data to the second node for resource handling as

taught by Lehtimaki in order to achieve more efficient use of network resources

[0041].

In regarding to claim 7, Lehtimaki teaches if the received communication

does not contain control data, the received communication forwarded by the third

node to the first node [0037].

In regarding to claim 8, Lehtimaki teaches the splitter included in the third

node [0018], [0040].

In regarding to claim 11, Darland teaches a system for enabling

communication between a first network in which control functions and user

functions are combined in the same node and another network in which user

functions and control function are implemented in separate nodes, the system

comprising: a first node in the first network, wherein user functions and control

functions are handled in the first node (Column 2 Line 21–28); a device for

determining whether a received communication contains control data, and, if the

received communication contains control data, extracting control data from the

received communication (Column 8 Line 29–34). Darland, however, does not

teach a second node in the second network wherein control functions are handled

in the second node, a third node in the second network wherein user functions are

handled in the third node and forwarding the control data to the second node.

Lehtimaki teaches a second node in the second network wherein control functions

are handled in the second node, a third node in the second network wherein user

functions are handled in the third node [0018] and forwarding the control data to

the second node [0040]. It would have been obvious to one skilled in the art to

modify Darland to use separate nodes for the control and user function and forward

the control data to the second node as taught by Lehtimaki in order to achieve more

efficient use of network resources [0041].

In regarding to claim 12, Lehtimaki teaches if the third node wants to

forward control data to the first node, the third node first forwards the control data

to the second node, which converts the control data to GTP returns the converted

control data to the third node and the third node forwards the GTP control data to the first node [0040].

In regarding to claim 13, Lehtimaki teaches the splitter included in the third node [0018], [0040].

14.   Claim 4, 5, 9, 10, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Darland et al. in view of Lehtimaki et al. and further in view of Lintulampi (US Patent 6,377,804).

In regarding to claim 4, 9 and 14, Darland teaches extracting control data and Lehtimaki teaches using separate user plane and control plane. Darland in view of Lehtimaki, however, does not teach the first network as a second generation packet data network and the second network as a third generation packet data network. Lintulampi teaches the first network as a second generation packet data network and the second network as a third generation packet data network (Column 1 Line 56–64). It would have been obvious to one skilled in the art to modify Darland in view of Lehtimaki to be used with the first network as a second generation packet data network and the second network as a third generation packet data network as taught by Lintulampi in order to utilize existing network in the process of generation turnover (Column 1 Line 28–40).

In regarding to claim 5, 10 and 15, Lintulampi teaches the first network as a second generation Global Packet Radio Service (GPRS) network and the second network as a third generation Universal Mobile Telecommunication System (UMTS) network (Column 3 Line 44–48).

Response to Arguments

15.   Applicant's arguments filed on March 23, 2004 have been fully considered but they are not persuasive.

The applicant argues, regarding claim 1, that Darland does not teach splitting an incoming signal into a control part and a user part (Remark Page 7 Line 3–11). Applicant's arguments are moot in view of the new ground(s) of rejection. Claim 1 is rejected as being unpatentable over Darland in view of Lehtimaki. Lehtimaki teaches using separate user plane and control plane [0018]. Therefore, the examiner contends that Darland in view of Lehtimaki teaches the limitations in claim 1.

The applicant further argues, regarding claim 2, that Darland in view of Lehtimaki does not teach if the received communication does not contain control data, the third node processes the communication (Remark Page 7 Line 21–25). Lehtimaki, however, teaches directly routing user data [0037]. Therefore, the

examiner contends that Darland in view of Lehtimaki teaches the limitations in

claim 2.

The applicant further argues, regarding claim 3, Lehtimaki does not teach

extracting and forwarding control data (Remark page 8 Line 8–10). Darland

teaches the steps of extracting control data (Column 8 Line 29–34). The steps of

using separate user plane and control plane is well known in the art (Lehtimaki

[0018]) and father motivation of using separate user/control plane could be to

enable independent scalability. Lehtimaki teaches forwarding the control data

[0040]. Therefore, the examiner contends that Darland in view of Lehtimaki

teaches the limitations in claim 3.

The applicant further argues, regarding claim 4, Darland in view of Palat et

al. does not teach splitting an incoming 2G signal into control data and user data

and processing the control data at the second node and processing the user data at

the third node (Remark Page 8 Line 25–28). Applicant's arguments are moot in

view of the new ground(s) of rejection. Claim 4 is rejected as being unpatentable

over Darland in view of Lehtimaki and further in view of Lintulampi. Darland

teaches receiving a communication (Column 2 Line 51), extracting control data

from the received communication (Column 8 Line 29–34) and processing user data

from the communication (Column 8 Line 62 – Column 9 Line 12). Lehtimaki

teaches using separate user plane and control plane [0018]. Lintulampi teaches the

first network as a second generation packet data network and the second network

as a third generation packet data network (Column 1 Line 56–64). Therefore, the

examiner contends that Darland in view of Lehtimaki and further in view of

Lintulampi teaches the limitations in claim 4.

Conclusion

16.   Applicant's amendment necessitated the new ground(s) of rejection

presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**.

See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as

set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire

THREE MONTHS from the mailing date of this action. In the event a first reply is

filed within TWO MONTHS of the mailing date of this final action and the

advisory action is not mailed until after the end of the THREE-MONTH shortened

statutory period, then the shortened statutory period will expire on the date the

advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will

be calculated from the mailing date of the advisory action. In no event, however,

will the statutory period for reply expire later than SIX MONTHS from the date of

this final action.

17.   Any inquiry concerning this communication or earlier communications from

the examiner should be directed to Clemence Han whose telephone number is

(703) 305-0372. The examiner can normally be reached on Monday-Friday 8 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, Huy Vu can be reached on (703) 308-6602. The fax phone

number for the organization where this application or proceeding is assigned is

703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR

only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR system,

contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C. H.
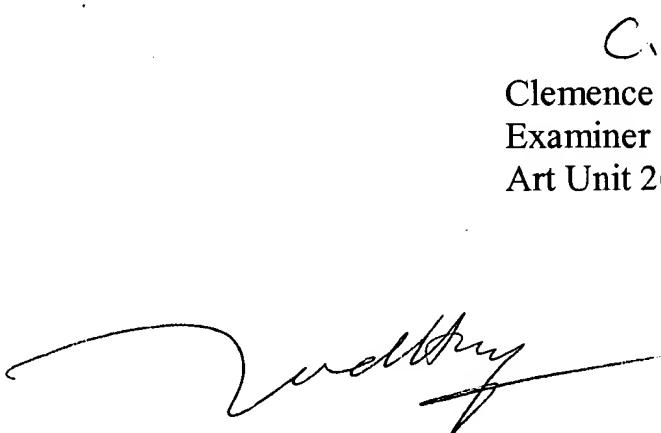
Clemence Han
Examiner
Art Unit 2665

HUY D. VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600